

VOICE ATTACHMENT TO AN EMAIL USING A WIRELESS COMMUNICATION DEVICE

Cross Reference to Related Patent Application

[0001] This application relates to and claims priority on provisional application serial number _____, filed March 29, 2001 and entitled "VOICE ATTACHMENT TO AN E-MAIL USING A WIRELESS COMMUNICATION DEVICE."

Field of the Invention

[0002] The present invention relates generally to radio and/or wireless communications. In particular, the present invention pertains to a system and method for providing improved electronic mail services to users of a wireless communication device.

Background of the Invention

[0003] The advent of wireless personal communications devices has revolutionized the telecommunications industry. Cellular, Personal Communications Service (PCS) and other services provide wireless personal communications to businesses and individuals at home, in the office, on the road, and any other locations the wireless network reaches.

[0004] Wireless telephone subscribers no longer have to use pay telephones along the road, or wait until they return home or to the office to check messages and return important business calls. Instead, wireless subscribers carry out their day to day

business from their cars, from the jobsite, while walking along the airport concourse, and just about anywhere their signals are accessible.

[0005] Thus, it is no surprise that since the introduction of the cellular telephone service, the number of wireless telephone subscribers has increased steadily. Today, the number of wireless telephone subscribers is staggering and still growing rapidly. In fact, many households have multiple wireless telephones in addition to their conventional land-line services.

[0006] With a market of this size, there is fierce competition among hardware manufacturers and service providers. In an attempt to lure customers, most providers offer handsets with desirable features or attributes such as small size, light weight, longer battery life, speed dial, and so forth. Many recent additions to the marketplace include multi-functional handsets that even provide pocket-organizer functions and electronic mail (email) and Internet access integrated into the wireless handset. Most manufacturers, however, are still scrambling to add new features to their communication devices to snare a portion of this booming market.

[0007] Access to email is an important new feature in wireless handsets today. To use this feature, users dial into their email servers. The email can be read on a small screen on the wireless handset. Alternatively, if the email contains a sound file, or a link to a sound file, the sound file can be played over the speaker(s) of the wireless handset. Users can also reply to email using their wireless handsets. Because of the limited size of these handsets, a method for inputting responses other than the common typing keyboard had to be devised. Typically, letters are input based on the traditional

telephone keypad. For example, the letters A, B, and C are input by pushing the "2" pushbutton; D, E, and F are input by pushing the "3" pushbutton, and so on. The multiple letters associated with a single pushbutton are differentiated by pushing the same pushbutton repeatedly. For example, D is input by pushing "2" once, E is input by pushing "2" twice, and F is input by pushing "2" three times. As another example, MIKE would be input by the following series of pushbuttons: 6, 4-4-4, 5-5, 3-3.

[0008] This method of inputting typed email content, however, is cumbersome. Given the small keypads included on most wireless communication devices, extensive data input may be time-intensive and may lead to errors in the email content. Accordingly, there is a need for a system and method for providing improved electronic mail services to users of a wireless communication device.

Objects of the Invention

[0009] It is, therefore, an object of the present invention to provide users of a wireless communication device with an improved system and method for using electronic mail with a wireless communication device.

[0010] It is another object of the present invention to provide a method for attaching an audio file to an electronic mail message.

[0011] Another object of the present invention is to provide a wireless communications system that enables a user of a wireless communication device to attach an audio file to an electronic mail message.

[0012] Yet another object of the present invention is to provide a convenient and simple method for sending an electronic mail message with a voice mail attachment.

[0013] It is another object of the present invention to provide a method for sending an electronic mail message with an attached digital audio file or a link to a digital audio file.

[0014] Another object of the present invention is to provide a multimedia electronic mail system over a wireless communications network.

[0015] Additional objects and advantages of the present invention are set forth, in part, in the description which follows and, in part, will be apparent to one of ordinary skill in the art from the description and/or from the practice of the present invention.

Summary of the Invention

[0016] The invention is a system and method directed toward allowing the user of a wireless communication device with email access to send email with a voice mail attachment in the form of a digital audio file or a link to a digital audio file that is sent over the email system.

[0017] The wireless handset user can send email that contains an audio file rather than text only. After the user selects to send an audio attachment, the user inputs an audio signal (typically, voice) into the handset microphone. This audio signal is transmitted to the voice mail server. The server converts the voice message to a digital file. After the user is finished transmitting the sound signal, the user can send the newly created digital audio file directly as an attachment to the email, or the user can send a link to the file for streaming web delivery of the file. Then the user can

disconnect from the server or select other options. The user can send an audio file attachment to a new email addressee or as a response to an email received by the user. That is, the user can create a new email to be sent and attach an audio file. The user can also send an audio file attachment as a response to an email containing an audio file attachment.

[0018] In one embodiment, the present invention is a method for sending an audio file to an electronic mail (email) recipient over a wireless communications network from a user of a wireless communication device. The method may comprise the steps of communicatively connecting to a first server over the wireless communications network; selecting an option to send the audio file to the email recipient; communicatively connecting to a second server over the wireless communications network; recording the audio file on the second server; and sending the audio file to the email recipient.

[0019] In another embodiment, the present invention is a multimedia electronic mail (email) system for sending a voice message to an email recipient. The system of the present invention may comprise a wireless communications network capable of supporting audio and data transmission; and a wireless communication device in communication with the wireless communications network, the wireless communication device comprising: a receiver for receiving email text; a display for displaying the email text to a user of the wireless communication device; and audio input/output means for receiving audio input and delivering audio output. The system further comprises converting means for converting the voice message to a digitally stored audio file, wherein the converting means is in communication with the wireless communication

device over the wireless communications network; and mailing means for sending the audio file to the email recipient, wherein the mailing means is in communication with the wireless communication device over the wireless communications network.

[0020] It is to be understood that both the foregoing general description and the following detailed description are exemplary and explanatory only, and are not restrictive of the invention as claimed. The accompanying drawings, which are incorporated herein by reference, and which constitute a part of this specification, illustrate certain embodiments of the invention, and together with the detailed description serve to explain the principles of the present invention.

Brief Description of the Drawings

[0021] The present invention is described with reference to the accompanying drawings:

[0022] Fig. 1 is a top level block diagram illustrating an example system architecture according to an embodiment of the present invention;

[0023] Fig. 2 is a block diagram illustrating an example implementation of a wireless communications network according to an embodiment of the present invention;

[0024] Fig. 3 is a block diagram of a wireless handset mobile telecommunication device and base station according to an embodiment of the present invention;

[0025] Fig. 4 is a top level block diagram of a conventional wireless Web architecture as presently known in the art;

[0026] Fig. 5 is a top level block diagram of a conventional wireless telephone architecture as presently known in the art;

[0027] Fig. 6 is a block diagram illustrating a system architecture according to an embodiment of the present invention;

[0028] Fig. 7 is a block diagram illustrating an example communication flow between components of the system architecture according to an embodiment of the present invention;

[0029] Fig. 8 is a block diagram illustrating an example communication flow between components of an architecture for providing audio items to a wireless (device according to an embodiment of the present invention;

[0030] Fig. 9 is a block diagram illustrating an example communication flow between components of the system architecture according to an embodiment of the present invention;

[0031] Figs. 10a-d are block diagrams illustrating a detailed process flow according to an embodiment of the present invention;

[0032] Fig. 11 is a block diagram of a user interface for a wireless communication device according to an embodiment of the present invention; and

[0033] Fig. 12 is a block diagram illustrating a general process flow according to an embodiment of the present invention.

Detailed Description of the Preferred Embodiments

[0034] Reference will now be made in detail to a preferred embodiment of the multimedia electronic mail (email) system **10** of the present invention, an example of which is illustrated in the accompanying drawings.

[0035] Fig. 1 is a top level block diagram illustrating an example system architecture according to one embodiment of the multimedia email system **10** of the present invention. The multimedia email system **10** includes a wireless communications network (not shown), a World Wide Web (WWW)/Email server **105**, an Interactive Voice Response (IVR) server **110**, and at least one wireless communication device (WCD) **115**.

[0036] The WWW/Email server **105** is communicatively coupled with the IVR server **110** and the WCD **115**. In one embodiment, the WWW/Email server **105** and the IVR server **110** can be housed in a common platform means, such as, for example, a computer. Alternatively, the WWW/Email server **105** and the IVR server **110** can each reside on a separate computer. The WCD **115** is communicatively coupled with the WWW/Email server **105** and the IVR server **110** over the wireless communications network.

[0037] Fig. 2 is a block diagram illustrating an example implementation of a wireless communications network **205** according to one embodiment of the present invention. The wireless communications network **205** may comprise at least one base transceiver station (BTS) **220**, at least one base station controller (BSC) **225**, and at least one mobile switching center (MSC) **230**. The WCD **115** may communicate with public

networks **235** through the MSC **230** of the wireless communications network **205**.

Examples of the public networks **235** that the MSC **230** may interface with include, but are not limited to, an Integrated Services Digital Network (ISDN) **240**, a Public Switched Telephone Network (PSTN) **245**, a Public Land Mobile Network (PLMN) **250** and a Packet Switched Public Data Network (PSPDN) **255**. The wireless communications network **205** may comprise a cellular network, a GSM network, a PCS network, or any other wireless or radio communication network.

[0038] Generally, the WCD **115** is the mobile equipment or phone carried by a user of the wireless communications network **205**. The BTS **220** interfaces with multiple WCDs **115** and manages the radio transmission paths between the WCDs **115** and the BTS **220**. The BSC **225** manages the communication flow between a WCD **115** and the multiple BTSs **220**. For example, the BSC **225** handles communication traffic with the MSC **230**. As described above, the MSC **230** may interface with a plurality of public networks **235**.

[0039] The WCD **115** can communicate with the BTS **220** using a standardized radio air interface, colloquially referred to as the "Urn" interface. The BTS **220** is typically within a geographic area known as a "cell" and handles communications for all wireless devices within the cell. The BTS **220** is usually in the center of the cell and consists of one or more radio transceivers with an antenna. The BTS **220** establishes radio links and handles radio communications over the Urn interface with the WCDs **115** within the cell. The transmitting power of the BTS **220** defines the size of the cell. Each BSC **225** can manage multiple (as many as hundreds) of the BTSs **220**. The BTS/BSC

communication may take place over a standardized interface, which is specified by the industry to be standardized for all manufacturers. The BSC **225** may allocate and manage radio channels and control the handover of calls between the BTSs **220**.

[0040] The BSCs **225** communicate with the MSC **230** over a standardized interface. The MSC **230** may manage communications between two mobile subscribers at separate WCDs **115**. Additionally, the MSC **225** may manage communications between mobile subscribers at a WCD **115** and a second party in one of the public networks **235**. Details of the wireless communication network **205** are presented for illustrative purposes only and implementation of the invention is not dependent on any particular wireless communication network.

[0041] One embodiment of the WCD **115** and the BTS **220** is illustrated in Fig. 3. In the preferred embodiment, the WCD **115** is a wireless phone. The WCD **115** may comprise a Code Division Multiple Access (CDMA) phone, a cdma2000 phone, a 3G phone, a Time Division Multiple Access (TDMA) phone, and/or any other wireless communication device suitable for voice and data communication over the wireless communications network **205**. The WCD **115** typically includes an antenna **910**, a transceiver **915**, a baseband processor **940**, a controller **935**, and a user interface **945**. As discussed, the WCD **115** is configured to communicate with other communications devices, such as the BTS **220**.

[0042] The transceiver **915** includes a transmitter **925** that transmits voice and data information via the antenna **910** to a recipient communication device such as, for example, a BTS **220**. The transceiver **915** also includes a receiver **920** that receives

voice and data information from another communication device (e.g., BTS **220**). The received voice and data information is provided to the user or used to facilitate device operation.

[0043] In one embodiment, the multimedia email system **10** further includes a call detector **950**, as shown in Fig. 3. In the preferred embodiment, the call detector **950** is a caller ID system used to identify the user of the WCD **115**. The call detector **950** includes an antenna **955** for transmitting and receiving caller identification information, a receiver **960** for receiving voice and data information from another communication device, and a call indicator **965**, such as, for example, an LED screen, for indicating the information about the incoming call. In the preferred embodiment, the call detector **950** is part of the IVR server **110**. Alternatively, the call detector **950** may be housed separate from, but in communication with, the IVR server **110**.

[0044] An embodiment of the user interface **945** of the WCD **115** is shown in Fig. 11. Typically, the user interface **945** will include a keypad **1100** for controlling the device and data entry, a display **1110** for displaying relevant information to the user, a microphone **1130** for receiving audio input, and a speaker **1120** for delivering audio output, as shown in Fig. 11. The microphone **1130** accepts voice or other audio input from the user and converts this information into electrical signals that can be transmitted by the transceiver **915**. Likewise, the speaker **1120** converts electrical signals received by the transceiver **915** into audio information that can be heard by a user of the WCD **115**. The display **1110** shows information such as call information, email text information, keypad entry information, signal presence and strength

information, battery life information, or any other information useful to the user. The WCD **115** and the display **1110** may be adapted to present text to the user by means of a wireless markup language, such as, for example, wireless application protocol (WAP) and/or handheld device markup language (HDML). The display **1110** preferably takes the form of a liquid crystal display (LCD), which has low power consumption characteristics, but could also be implemented as a light emitting diode (LED) display or any other appropriate visual indicator.

[0045] The keypad **1100** typically includes an alphanumeric keypad and may also include special function keys. In one embodiment, the keypad **1110** is backlit to permit viewing of the keys in low light or dark conditions. The WCD **115** may also include a flip panel (not shown) that can be closed to conceal some or all of the keypad **1100**.

[0046] The user utilizes the user interface **945** to generate information to be transmitted back to the other party to the communication link. The user interface **945** transforms the user input into electrical signals to be used by the WCD **115**. The transformed electrical signals are coupled from the user interface **945** to the baseband processor **940**, as shown in Fig. 3. The baseband processor **940** formats the electrical signals. The baseband processor **940** may filter, amplify, and modulate the user signals into specified formats. The formatted signals are then coupled to the transmitter **925**.

[0047] The transmitter **925** filters, amplifies, and converts the signal. The transmitter **925** then couples the resultant RF signal to the duplexer **930**, which couples the signal to the antenna **910**. The transmitted signal then propagates from the antenna **910** to the BTS **220**.

[0048] A power source (not shown) provides power to the various components of the WCD **115**. Any suitable power source may be utilized, but a rechargeable lithium ion battery is preferable. In one embodiment, the battery is implemented as an easily removable and exchangeable battery pack. Power may also be provided by an external cable that plugs into a mating slot in the WCD **115**, either to recharge the battery or to act independently as a power source.

[0049] The WCD **115** may further include a subscriber identity module (SIM) **215**, as shown in Fig. 2. The SIM **215** may be a memory device that stores identification information about the subscriber of the multimedia email system **10** and/or the WCD **115**. The SIM **215** may be implemented as a smart card or as a plug-in module that activates service from any WCD **115**. Among the information stored on the SIM **215** may be a unique International Mobile Subscriber Identity (IMSI) that identifies the subscriber to wireless communication network **205**, and an International Mobile Equipment Identity (IMEI) that uniquely identifies the mobile equipment. Alternatively, a unique identifier for the mobile WCD **115** may be the telephone number for the WCD **115**. Other information, such as, for example, a personal identification number (PIN) and billing information, may be stored on the SIM **215**.

[0050] Fig. 4 is a top level block diagram of a conventional wireless Web architecture as presently known in the art. The WCD **115** is connected to the WWW/Email server **105** through a wireless communications network including a BTS **220**. The WCD **115** communicates with the WWW/Email server **105** in data mode, which allows for the exchange of data in discrete packets.

[0051] Fig. 5 is a top level block diagram of a conventional wireless telephone architecture as presently known in the art. The WCD **115** is connected to a telephone exchange **405** through a wireless communications network including a BTS **220**. The WCD **115** communicates through the telephone exchange **405** in voice mode, which provides a dedicated circuit for audio communications between the WCD **115** and the device with which it is temporarily connected.

[0052] Fig. 6 is a block diagram illustrating an example architecture for attachment of a voice message to an email message sent with the WCD **115** according to an embodiment of the present invention. The WCD **115** is connected to the WWW/Email server **105** through the wireless communications network **205**, including the BTS **220**. The WCD **115** communicates with the WWW/Email server **105** in data mode, which allows the user of the WCD **115** to navigate through an electronic mail account provided by the server. When the user of the WCD **115** selects an option for attaching a voice file to an electronic mail, the WCD **115** disconnects from the WWW/Email server **105** and connects to the IVR server **110**. The connection between the WCD **115** and the IVR server **110** is in voice mode, which provides a dedicated circuit for audio communication between the WCD **115** and the IVR server **110**. As previously mentioned, the WWW/Email server **105** and the IVR server **110** may be housed together in a single unit **505**.

[0053] Fig. 7 is a block diagram illustrating an example communication flow between components of an architecture for sending an audio attachment to an email on the WCD **115** according to one embodiment of the present invention. Once the

WWW/Email server **105** instructs the WCD **115** to disconnect and connect to the IVR server **110**, the WWW/Email server **105** notifies the IVR server **110** of the pending connection with the WCD **115**. To notify the IVR server **110**, the WWW/Email server **105** sends certain information to the IVR server **110**. For example, the WWW/Email server **105** may send information that uniquely identifies the WCD **115** by its user identification (UID). In one embodiment, the UID may be the telephone number for the WCD **115**.

[0054] Communication between the WWW/Email server **105** and the IVR server **110** can be direct inter-process communication or network based communication. For example, if the WWW/Email server **105** and the IVR server **110** are housed in a single computer **505**, then inter-process communication may be advantageously used by the WWW/Email server **105** to notify the IVR server **110** of the pending connection from WCD **115**.

[0055] In addition to passing the UID, the WWW/Email server **105** can also pass a command to the IVR server **110** to record an audio file from the WCD **115**. In this manner, when the IVR server **110** receives the connecting call from the WCD **115**, it informs the user that it is ready to record the audio file for attachment.

[0056] Fig. 8 is a block diagram illustrating an example communication flow between components of an architecture for providing audio to the WCD **115** according to one embodiment of the present invention. Once the user of the WCD **115** has selected the option for an audio attachment to an electronic mail, the WWW/Email server **105** instructs the WCD **115** to terminate the data mode connection and establish a voice

mode connection with the IVR server **110** (not pictured). The WWW/Email server **105** may accomplish this by passing data to the WCD **115**. In one embodiment, the data passed to the WCD **115** by the WWW/Email server **105** includes a telephone number for the IVR server **110**. In one embodiment of the present invention, the WCD **115** then automatically connects with the IVR server **110**. In an alternative embodiment, the user of the WCD **115** uses the information contained in the data passed to the WCD **115** by the WWW/Email server **105** and manually connects with the IVR server **110**.

[0057] Fig. 9 is a block diagram illustrating an example communication flow between components of an architecture for sending an audio attachment to an email on the WCD **115** according to one embodiment of the present invention. Once the WCD **115** has disconnected from the WWW/Email server **105** (not pictured), it can connect to the IVR server **110**. When connecting to the IVR server **110**, the WCD **115** passes a user identification (UID) to the IVR server **110**. In one embodiment, the UID allows the IVR server **110** to uniquely identify the WCD **115**.

[0058] For example, the UID can be the unique telephone number assigned to the WCD **115**. When the WCD **115** connects with the IVR server **110**, it passes the UID to the IVR server **110**. Based on the information received from the WWW/Email server **105**, the IVR server **110** expects to record an audio input from the WCD **115**.

[0059] Fig. 12 is a general flow diagram illustrating a preferred embodiment of the method of the present invention. Figs. 10a-d form a detailed flow diagram illustrating a preferred embodiment of the present invention.

[0060] With reference to Fig. 12, the user of the WCD **115** connects to the WWW/Email Server **105**, as shown in step **1115**, and described in connection with Figs. 1, 6, 7, and 8. In step **1220**, a user may choose to send an email file with a voicemail audio attachment. In step **1230**, the WCD **115** connects to the IVR Server **110**, as described in connection with Figs. 1, 6, 7 and 9. In step **1240**, the IVR records the audio input and stores it as an audio file. In step **1250**, the WWW/Email Server **105** attaches the audio file to the email and sends the email. In step **1260**, the WCD **115** reconnects to the WWW/Email Server. This is a general description of the flow of the present invention.

[0061] A more detailed description of the flow of the present invention will now be explained, with reference to Figs. 10.a-d. With reference to Fig. 10a, steps **1000** to **1008** show typical ways that the user may choose to communicatively connect to the WWW/Email Server **105** by means of the WCD **115**. In step **1000**, the user dials the number on the WCD **115** to make a connection to the WWW server of the WWW/Email server **105**. In step **1002**, a data mode connection is made between the WCD **115** and the WWW Server. In step **1004**, the user selects an option for connecting to an Email Server of the WWW/Email server **105**. This establishes a data mode connection with the Email Server, as shown in step **1008**. Alternatively, as shown in step **1006**, the user may dial the number for a connection to the Email Server directly. This also establishes a data mode connection with the Email Server, as shown in step **1008**. In the preferred embodiment, the data mode connection may be the same data mode connection as that employed for the connection to the WWW Server. It is contemplated

that the WWW server and the Email server may reside separately or may be part of the same server, and are collectively referred to as the WWW/Email server **105**.

[0062] Steps **1010** to **1016** show typical ways that the user may select an option to attach an audio file to an email to be sent, as shown generally in step **1220** of Fig. 12.

With continued reference to Fig. 10a, in step **1010**, the user selects an option to compose a new email. In step **1016**, the user selects an option to attach an audio file to the email. In step **1013**, the email Server **105** flags the email that was being composed.

[0063] Alternatively, as shown in step **1012**, the user may choose to view a received email. In step **1011**, the user selects an option to respond to the email. Then, in step **1016**, the user may choose to attach an audio file to the response to the received email. In step **1013**, the email Server **105** flags the email that was being viewed. In the alternative, after viewing a received email, as shown in step **1012**, the user may choose to listen to an audio attachment to the received email, as shown in step **1014**.

[0064] Next, the WCD **115** must connect to the IVR server **110**, as shown generally in step **1230** of Fig. 12. This step is shown in more detail in steps **1018** to **1026** of Fig.

10b. In step **1018**, the Email Server **105** sends a command to the WCD **115** to disconnect from the Email Server **105** and connect to the IVR Server **110**. The command also may contain a telephone number for the connection to the IVR server **110**. In step **1020**, the Email Server **105** sends a command to the IVR Server **110** to prepare for the call from the WCD **115**. The command may also contain a number identifying the WCD **115**. Preferably, the number is the telephone number of the WCD

115. In step **1022**, the WCD **115** terminates the data mode connection with the Email Server **105**. In step **1024**, the WCD **115** dials the number to connect to the IVR Server **110**, making an audio mode connection. In step **1026**, the WCD **115** stores state information telling itself to reconnect to the WWW/Email Server **105** after it disconnects from the IVR Server **110**.

[0065] Steps **1028** to **1048** show, in detail, the processes which may lead to recording of the audio file. The process of recording the audio file is shown, generally, in step **1240** of Fig. 12. With reference to Fig. 10b, in step **1028**, the IVR Server **110** answers the question whether the purpose of this connection was to listen to an audio attachment to a received email (step **1014**) or to record an audio attachment for an email to be sent (step **1016**). The purpose was sent by the Email Server **105** in step **1020**.

[0066] As shown in step **1030**, the purpose may be to record an audio attachment to an email to be sent. In this instance, the IVR Server **110** records audio input and stores it as an audio file. Then, as shown in step **1040**, the user indicates that the audio input is complete, or a maximum time elapses.

[0067] In the alternative, as shown in step **1032**, the purpose may be to listen to an audio file attached to a received email. In step **1034**, the IVR Server **110** plays the audio file on the WCD **115** for the user. The user may then choose, as shown in step **1036**, to reply with an email having an audio file attachment. In this case, and if the purpose was to record an audio file attachment for an email to be sent, the IVR Server **110** records the audio input from the user, converting it and storing it as a digital audio

file, as indicated by step **1038**. It is contemplated that the audio file may comprise a .wav file, a streaming audio file, or any other suitable audio medium adapted for storing on the IVR server **110** and delivery over the wireless communications network **205**.

[0068] As shown in Fig. 10c, in step **1042**, the IVR Server **110** asks the user whether they wish to re-record the audio file attachment, cancel, or send the email with the audio file attachment. If the user selects to re-record, as shown in step **1046**, the flow returns to step **1038**. If the user chooses to cancel, as shown in step **1044**, the flow returns to step **1008**. If the user chooses to send the email with the audio file attachment, as shown in step **1048**, the process of recording the audio file attachment, step **1240** of Fig. 12, is complete, and the process flow continues to step **1050**.

[0069] Steps **1050** to **1052** show, in detail, a process for sending the email with the audio file attachment. This process is shown generally in step **1250** of Fig. 12. With reference to Fig. 10d, in step **1050**, the IVR Server **110** notifies the WWW/Email Server **105** that an audio file is ready for attachment to an email. The notification may also contain an identification indicating which WCD **115** this audio file is for. The identification is preferably the telephone number of the WCD **115**. In step **1052**, the WWW/Email Server **105** attaches the audio file from step **1038** to the email flagged in step **1013**, and sends the email. In the alternative, the attachment of the audio file in step **1052** may include sending a hyperlink to the audio file stored in a database on the IVR Server **110**. It is contemplated that, if more than one email was flagged in step **1013**, the WWW/Email Server **105** may prompt the user with the option of selecting to which electronic text mail message the audio file or hyperlink should be attached.

[0070] Steps **1054** to **1066** show a detailed flow process of how the WCD **115** reconnects to the WWW/Email Server **105**. This process is shown generally in step **1260** of Fig. 12.

[0071] With continued reference to Fig. 10d, in step **1054** the IVR Server **110** asks the user whether the user wishes to listen to the next audio file attached to an email or return to viewing text email. If the user selects an option for listening to another audio file attached to an email, as shown in step **1058**, the flow returns to step **1034**. If the user selects an option for returning to viewing text email, as shown in step **1056**, the IVR Server **110** sends a command to the WCD **115** to disconnect from the IVR Server **110**, as shown in step **1060**. Then, as shown in step **1062**, the WCD **115** disconnects from the IVR Server **110** and reconnects to the WWW/Email Server **105**, based on its saved state information from step **1026**. This creates a data packet mode connection, as shown in step **1064**. In step **1066**, the WWW/Email Server **105** returns the user to the same place in the user's email accounts as where the user left off from steps **1010**, **1012**, or **1014**. For example, the user may have folders in the user's email account, and the user may return to viewing the same folder that the user was using in steps **1008**, **1010**, **1012**, or **1014**.

[0072] It will be apparent to those skilled in the art that various modifications and variations can be made in the construction, configuration, and/or operation of the present invention without departing from the scope or spirit of the invention. For example, in the embodiments mentioned above, various changes may be made to the WWW/Email server, the IVR server, the wireless communication device, and the

wireless communications network without departing from the scope and spirit of the invention. Moreover, it may be appropriate to make additional modifications or changes to the method of attaching a voice message to an email message without departing from the scope of the invention. Thus, it is intended that the present invention cover the modifications and variations of the invention provided they come within the scope of the following claims and their equivalents.